Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Application of Verizon New Jersey, Inc.,	)	
et al., For Authorization to Provide	)	
In-Region, InterLATA Services	)	WC Docket No. 02-67
in New Jersey	)	
	)	

DECLARATION OF CHRIS FRENTRUP
ON BEHALF OF WORLDCOM, INC.

Based on my personal knowledge and on information learned in the course of my duties, I, Chris Frentrup, declare as follows:

I. INTRODUCTION AND SUMMARY

1. I am the same Chris Frentrup who filed a Declaration and Supplemental Declaration in the initial section 271 application by Verizon New Jersey, Inc. ("Verizon"). See WorldCom Comments, January 14, 2002, Attachment B, WorldCom Supplemental Comments, March 13, 2002, Attachment A in CC Docket 01-347. The cost support provided by Verizon in the above-captioned matter provides no new information regarding Verizon's switching rates, instead incorporating by reference the information previously filed in CC Docket No. 01-347. This Declaration analyzes Verizon's costing methodology for switching, describing several significant total element long run incremental cost ("TELRIC") errors committed by Verizon. It also rebuts various mischaracterizations of the record provided by Verizon in its ex parte filings in this docket and in CC Docket No. 01-347. Finally, it describes a conceptual error made by

Verizon in its computation of the "non-loop" rate differential between New York and New Jersey, which resulted in a misstated comparison of rates in those states.

2. Due to the uncorrected errors described herein, Verizon's current unbundled switching rates in New Jersey are not based on TELRIC and are excessive.[1] Unless these errors are corrected, the Commission should reject Verizon's section 271 application for New Jersey.

3. First, as WorldCom noted in its responses to Verizon's previous New Jersey 271 application and demonstrates further below, the factors used by Verizon to expand busy hour minutes to total annual minutes do not include any usage for weekends or holidays, which results in excessive usage rates. Furthermore, the rationale given by the New Jersey Board of Public Utilities ("NJ-BPU") for allowing use of this methodology is premised on a misunderstanding of the manner in which switches are engineered, and misinterprets cost models cited in the state record. Because this methodology does not use all the demand handled by the network, it violates the TELRIC methodology. The Commission should require Verizon to set its switching rates using all demand for the year, not just the demand on the 251 business days in the year. Making the conservative assumption that daily usage on these off-peak days would be half the daily usage on the peak days would lower the switch usage rates by 18.5 percent, as set forth in WorldCom's initial comments. In our review of the confidential cost information filed by Verizon, we have discovered data that indicates that, in New Jersey, the level of holiday usage is actually significantly more than half the level of business day usage. Use of this data from Verizon would result in a reduction of *** *** percent.

1 In addition to the errors discussed in this declaration, the other input and methodology errors discussed in WorldCom's initial comments remain as well. The errors emphasized in this Declaration are indisputable TELRIC violations, which the Commission must require Verizon to correct before granting it section 271 authorization for

4. Second, the resulting overstated switching rates are applied on both ends of an intra-switch call, even though the call passes through the switch only once. Assuming, as the Commission has in its TELRIC benchmark analyses, that 25 percent of local calls are intra-switch, this results in competitive local exchange carriers ("CLECs") being overcharged another 11 percent for switching. This issue is simply not addressed by the NJ-BPU at all. Both the New York and Massachusetts commissions, among others in the Verizon territory, have rejected this double-charging for intra-switch calls. By allowing Verizon to set its per-minute switching rates based on less than the total number of minutes (by excluding weekend and holiday minutes), and then assessing those rates on more than the total number of minutes transiting a switch (by charging two minutes for each intra-switch minute), the NJ-BPU has clearly allowed Verizon to charge substantially more than the TELRIC of switching.

5. Finally, the NJ-BPU allows Verizon to inflate switch usage rates by the inclusion of the cost of vertical features in those variable rates rather than in the fixed port rate. The NJ-BPU explains that a reason for doing so is that placing more costs in usage rates will encourage CLECs to deploy more of their own switches. However, TELRIC principles require that rates be set to recover costs. Setting prices at above-cost levels cannot be excused by a questionable policy judgment that doing so is desirable to provide an extra incentive to CLECs to increase their investment.

New Jersey.

II. VERIZON'S USE OF ONLY BUSINESS DAYS TO SET SWITCHING RATES IS INCONSISTENT WITH TELRIC

6. Verizon set its switch usage rates by dividing the cost of the usage portion of the switch by an estimate of total annual switched minutes. The problem with Verizon's approach is that, in deriving its estimate of annual minutes, it leaves out usage on weekends and holidays. Verizon correctly determines the size of the switches needed based on peak minutes of usage for the switches. It then estimates total annual switched minutes in two steps.

7. The first step determines average business day usage of the switch by multiplying minutes of peak usage by the ratio of busy hour usage to total daily usage. This ratio is determined based solely on usage for weekdays.[2] After obtaining the average business day daily usage in this manner, Verizon then obtains total annual switched minutes by multiplying the average daily usage by only 251 days, that being the number of weekdays less holidays in a year. Neither of these steps adjusts the estimate of annual minutes for weekend and holiday usage.

8. The error of Verizon's failure to include such an adjustment is made even clearer by the presence of data on weekend and holiday usage that is provided as part of the cost support for common transport and tandem switching.[3] Based on its Saturday, Sunday, and holiday usage, along with its business day usage, Verizon computes *** *** "equivalent business days" for common transport. Since the minutes carried by Verizon's common transport network must have gone through one of its switches, this number of

2 The derivation of this busy hour to total day usage ratio, which is *** ***, is provided in Verizon's ex parte filed on January 25, 2002 in CC Docket No. 01-347. The ratio can be found in cell G28 of sheet 4.4.BH RATIO of workbook usage122001.xls. This workbook can be found on the CD-ROM filed with the January 25 ex parte in the folder Exhibit G-1 – SWITCHING and FEATURES. The ratio is determined as the ratio of busy hour minutes to total minutes on Monday through Friday for March, June, and November of 1998 and March of 1999.
3 That data can be found in cells S3.AD27 of sheet 5.3 Busy Load in workbook NJTELTRANSPO2.xls. This workbook can be found on the CD-ROM filed with the January 25 ex parte in the folder Exhibit H-2 and H-3 –

equivalent business days will apply to its switches as well. Substituting these *** *** equivalent business days for the 251 business days used by Verizon to set its switching usage rates would result in a *** *** percent reduction in those rates.

9. As we have previously explained, Verizon's methodology for determining the number of minutes in a year allows it to recover all of its usage-sensitive costs of the switch over 251 days. As a result, all usage-sensitive charges that competitors pay in the remaining 114 days of the year are charges that do not reflect any costs at all. The result is that Verizon's usage-sensitive switch charges are grossly in excess of its costs. The NJ-BPU used three mistaken rationales for accepting Verizon's use of this methodology.

10. First, it agreed with Verizon's claim "that the busy hour determination is relevant to both sizing the switch and determining the manner in which costs should be spread among users." Decision & Order at 122. WorldCom also agrees that busy hour usage should determine the size of the switch. Switches are sized to provide an acceptable level of blocking of calls during the busy hour. However, once that size of switch is set, the correct usage to set the per-minute rate is all minutes that will be assessed the usage charge, not just usage during weekdays. Either Verizon should set the switch usage rate by dividing costs by all minutes, or Verizon should charge a zero rate for minutes that occur on weekends and holidays.

11. The second reason given by the NJ-BPU for not including weekend and holiday usage in setting the rate is that weekend and holiday usage would "effectively reduce average switch capacity." Id. This is incorrect. There is no such thing as "average switch capacity." A switch has a given capacity, once it is designed and put in place. If, e.g., 1 million minutes pass through a switch in the busy hour, it does not matter whether the busy hour occurs

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COMMON TRANSPORT and TDM SWITCHING.

once a month, once a week, or once a day. A switch sized to handle 1 million minutes in the busy hour will be able to handle 1 million minutes every hour. Hours that do not have that level of demand do not change the switch's capacity; they merely change its average utilization.

12. Finally, the NJ-BPU cites the use of business days in the HAI Model and in a cost study sponsored by WorldCom's expert witness in a separate proceeding as justifying their use in this case. The NJ-BPU has misunderstood the use of business days in both cases. In the HAI Model (and in fact, in the Commission's Synthesis Model), the number of business days is used as an input to estimate the number of minutes switched in the busy hour given an annual number of minutes.[4] This estimate of busy hour minutes is then used to size the switch. However, once the size of the switch is determined, the usage rate is determined by dividing that switch usage costs by <u>all</u> minutes of use. Similarly, the study cited by the NJ-BPU that was performed by Worldcom's expert witness was for another CLEC that in fact had very little usage on the weekends.[5] And WorldCom's witness did include that small amount of weekend usage in the cost study.

13. Thus, the rationales proffered by the NJ-BPU in justification of its decision to allow Verizon to use only business day demand in setting switch usage rates misunderstand switch engineering and the role that business days played in other costs studies. Those rationales do not justify the NJ-BPU's decision. Since the use of only business days violates the TELRIC requirement that all demand be considered, the Commission should reject the use of only business days in setting switch usage rates. Using the very conservative

4 Note that Verizon's methodology does the opposite operation – given a number of busy hour minutes, it uses the number of business days to obtain an estimate of the total number of minutes.
5 Verizon also cites this study in its February 20, 2002 ex parte in CC Docket No. 01-347. It claims that WorldCom's witness acknowledged that exclusion of weekends is an acceptable practice. However, the section of testimony cited by Verizon contains no such admission by WorldCom's witness. In fact, it contains his discussion in

assumption previously made by WorldCom that usage on non-peak days is only half the level of usage on peak days implies that the switch usage rates should be 18.5 percent lower,[6] but use of Verizon's estimate of weekend usage discussed above requires an even larger *** ** percent reduction. The Commission should require Verizon to correct this clear error by reducing Verizon's switch usage rates to reflect usage on all days, or alternatively to offer switching usage at a zero rate on weekends and holidays, before it grants section 271 authority to Verizon.

III. INTRA-SWITCH CALLS SHOULD NOT BE ASSESSED TWO SWITCH USAGE CHARGES

14. Having developed an overstated switch usage rate, Verizon further raises CLEC costs by imposing this inflated switching rate twice for intra-switch calls, even though an intra-switch call passes through the switch only once. This "double charging" issue was not addressed in the Decision & Order, even though WorldCom raised it in the proceeding. This practice has been explicitly rejected by both the New York and Massachusetts commissions, and should be rejected for New Jersey as well.

15. Intra-switch calls do not use the switch processor two times. The call arrives at the switch from one customer, is processed by the single switch and routed to another customer who is served by that same switch. The call does not pass through the switch processor twice, and thus should not be charged for both an originating and terminating minute. Under the Commission's assumptions of 25 percent of local calls being intra-switch, this inflates CLEC switching costs by about 11 percent.

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support of using 308 days.

6 Assuming that demand on weekends and holidays is half the demand on business days is the approach taken by the New York Public Service Commission in its recent decision on unbundled switching rates. See Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements,

IV. VERTICAL FEATURES COSTS SHOULD BE RECOVERED IN PORT RATES

16. Verizon recovers its features costs through usage sensitive charges, even though the costs for providing features are not usage sensitive. The NJ-BPU declined to require Verizon to recover vertical features costs in the fixed port charge rather than in the variable usage charge. Its justification for doing so was that placing more costs in the usage sensitive rates would encourage carriers "to evaluate the feasibility of deploying their own switches to eliminate the uncertainty that comes with purchasing switching from Verizon NJ." See Decision & Order at 125. But if rates are set cost-causatively, both as to levels and structure, other carriers will receive the correct signals for deploying their own switches. The NJ-BPU is apparently willing to countenance usage rates that are set too high, in order to carry out its policy judgment that such high rates would be desirable to incent CLECs to install their own switches. This is a clear violation of TELRIC principles, and should not be permitted by the Commission.

V. SWITCH USAGE RATES SHOULD BE BEDUCED BY NEARLY HALF

17. The combined effect of these errors is to overstate Verizon's switch usage charges substantially. WorldCom estimates that correcting the number of business days as reflected in Verizon's cost model, moving the features costs to the port rather than usage rates, and removing the double charging for intra-switch calls would cut overall switch usage charges paid by competing carriers by about 48 percent.[7] This would reduce the sum of port and switch

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Case 98-C-1357, Order on Unbundled Network Element Rates, released January 28, 2002, at pages 36-39.
7 Since features costs are being moved from usage to port, the port rate would go up slightly under this proposal. However, the investment removed from usage charges is presented in Verizon's cost documentation as a per message investment, and the investments in the port model are all presented as per line investments. Data on messages per line are not provided in Verizon's cost documentation, so WorldCom cannot estimate the effect of this change on port rates.

usage charges below the recently adopted New York rates, consistent with the somewhat lower switching costs in New Jersey identified by the Commission's Synthesis Model.

VI. VERIZON MISCOMPUTES ITS BENCHMARK COMPARISON OF RATES

18. Verizon presents a benchmark analysis that shows slightly lower "non-loop" costs in New Jersey than New York, which is comparable to WorldCom's previous analysis. However, Verizon errs in computing the non-loop rates for New York and New Jersey using demand levels specific to those states.[8] This methodology will confound two differences between the states – differences in usage and differences in the rates. The resulting calculation does not permit the conclusion that rates in New Jersey are lower than in New York. For this reason, in performing its benchmark comparisons of costs and rates, the Commission has always used a standard set of usage assumptions to compute rate differences, as is required to obtain meaningful results. Verizon erroneously concludes that New Jersey's switching rates are lower than New York's as a result of its use of 7 percent fewer minutes in New Jersey.

19. In addition to applying the same usage assumption in both states, it is important to use a realistic number of minutes to calculate the prices that CLECs would have to pay. Since New Jersey has higher usage rates and a lower port rate than New York, New Jersey compares most favorably to New York when a lower number of minutes is used. As can be seen in the Declaration of Vijetha Huffman filed with WorldCom's comments, using the Commission's standard assumptions shows that New Jersey switching rates are in fact significantly greater than New York rates, even though the costs in New Jersey are slightly less.

VII. CONCLUSION

8 Verizon also presents an analysis of rates that appears to use the Commission's assumptions on usage to compute the non-loop rate. However, this analysis merely applies the proportions of usage types from the Commission's standard assumptions to state specific demand levels, rather than using those standard assumptions for both states.

20. The NJ-BPU's recent Decision & Order makes several clear errors in applying the TELRIC methodology to set switching rates. Until these errors are corrected and New Jersey switching rates substantially reduced, the Commission should reject Verizon's section 271 application.

21. This concludes my Declaration on behalf of WorldCom.

I declare under penalty of perjury that the foregoing is true and correct. Executed on April 8, 2002.

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Chris Frentrup